

Notice of Allowability

Application No.

10/799,145

Applicant(s)

CAFRI ET AL.

Examiner

Johnnie L. Smith II

Art Unit

2881

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to application filed 03/12/2004.
2. ☒ The allowed claim(s) is/are 1-35.
3. ☒ The drawings filed on 12 March 2004 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
 - * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

DETAILED ACTION

Allowable Subject Matter

1. Claims 1-35 are allowed.
2. The following is an examiner's statement of reasons for allowance: the prior art searched and cited failed to teach or fairly suggest a system for directing gas towards a specimen having an intermediate portion having a first end for receiving the inert gas and a substantially sealed second end; whereas the intermediate portion has a first and second apertures that are positioned such as to define a space through which the beam of charged particles can propagate; and whereas the intermediate portion is shaped such as to allow a first portion of the inert gas to exit the second aperture and to allow a second portion of the gas to propagate towards the second end and to be returned through the second aperture in combination with the remaining elements of claim 1. Claims 2-15 are allowable because of their dependencies upon claim 1. The prior art searched and cited also failed to teach or fairly suggest a central gas conduit portion, coupled to the first and second gas conduit portions, the central gas conduit portion defines a first aperture and a second aperture; whereas the central gas conduit portion is shaped such as to allow gas to exit via the second aperture at multiple directions; whereas the first and second apertures define a passage; and whereas the central gas conduit

is shaped such as to induce a substantially rotationally symmetrical magnetic field at a vicinity of the space in combination with the remaining elements of claim 16. Claims 17-26 are allowable because of their dependencies upon claim 16. In reference to claim 27, the prior art searched and cited failed to teach or fairly suggest a method of directing gas towards a specimen, having stages of: directing the gas towards the specimen at a positive direction and at a negative direction in relation to an imaginary axis that is perpendicular to an aperture out of the at least one apertures; and maintaining a substantially symmetrical magnetic field while receiving charged particles from the specimen in combination with the remaining elements of claim 27. Claims 28-35 are allowable because of their dependencies upon claim 27.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US patent publication 2002/0103861 (Bassom et al) and

2005/0103746 (Nadeau et al), US patents 6,770,867 (Lezec et al), 5,851,413 (Casella et al), 5,358,806 (Haraichi et al), 5,270,552 (Ohnishi et al), 6,838,380 (Bassom et al). All of the cited US references contain art similar to that being claimed by applicant, more specifically, methods and apparatuses utilizing gas delivering within particle beam processing.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Johnnie L. Smith II whose telephone number is 571-272-2481. The examiner can normally be reached on Monday-Thursday 7-4 P.M. and Alternate Fridays.

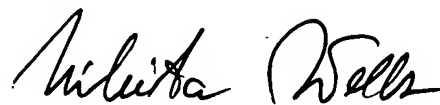
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John R. Lee can be reached on 571-272-2477. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



JLSII

Johnnie L Smith II
Examiner
Art Unit 2881



NIKITA WELLS
PRIMARY EXAMINER

08/08/05